

From: [McCarter, Jennifer](#)
To: [Jacobson, Linda](#)
Cc: [Churchill, Stephen](#); [Bailey, Treasure](#); [jill.parisi](#); [Muller, Sheldon](#); [Kilty, Quinn V](#)
Subject: RE: EPA request
Date: Friday, November 6, 2020 12:45:24 PM
Attachments: [Comanche Database Export \(2020-11-06_111024\).xlsx](#)
[DRAFT Comanche DataSummaryTable_rev20201106.xlsx](#)

Linda, attached are two spreadsheets. The first is a database export; this is useful since the data can be filtered and sorted. The second is the data summary table, updated from the 1026 version provided previously; this format is a bit more 'user friendly'. Both are updated with the data received from the lab to date, and I will send you updates as they are available. I'll also continue to send the lab PDF reports and the updated groundwater contour map.

Have a good weekend.

Regards,

Jennifer McCarter, R.E.M.

Xcel Energy

Environmental Analyst

Environmental Services Department

1800 Larimer St., Suite 1300, Denver, CO 80202-1414

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E: jennifer.mccarter@xcelenergy.com

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From: McCarter, Jennifer

Sent: Wednesday, November 4, 2020 4:59 PM

To: Jacobson, Linda <Jacobson.Linda@epa.gov>

Cc: Churchill, Stephen <Churchill.Stephen@epa.gov>; Bailey, Treasure <Bailey.Treasure@epa.gov>; jill.parisi <jill.parisi@state.co.us>; Muller, Sheldon <Muller.Sheldon@epa.gov>; Kilty, Quinn V <quinn.v.kilty@xcelenergy.com>

Subject: RE: EPA request

Hi Linda, I wanted to provide you an update. HDR said they will have the updated data in the next 1-2 days which will be current with all reports received to date, so I should be able to get it to you this week. Also, they did a single day round of water levels yesterday, and I'll provide an updated potentiometric map once they have the data processed. It'll take a little longer than the database, but still I would expect to have that to you next week. I hope this helps.

Regards,

Jennifer McCarter, R.E.M.

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Please consider the environment before printing this email

From: McCarter, Jennifer

Sent: Wednesday, November 4, 2020 2:24 PM

To: Jacobson, Linda <Jacobson.Linda@epa.gov>

Cc: Churchill, Stephen <Churchill.Stephen@epa.gov>; Bailey, Treasure <Bailey.Treasure@epa.gov>; jill.parisi <jill.parisi@state.co.us>; Muller, Sheldon <Muller.Sheldon@epa.gov>; Kilty, Quinn V <quinn.v.kilty@xcelenergy.com>

Subject: RE: EPA request

Hi Linda,

Attached is the most recent data summary I have from HDR. It includes the first couple of rounds on new wells, and the older data. I've requested an update from HDR and expect to be able to provide that this week. As you'll see on the attached and from the lab transmittals I previously provided, the results do not always come at the same time for each sampling round, so you may see apparent data gaps, particularly for radium. I'll plan to send you updates as we incorporate the majority of results for each round to make the information most useful to you, along with the lab reports. Also attached is a potentiometric surface map based on August 2020 water levels. I do not think these were all taken within 24 hours, and have requested an updated figure that reflects a 24-hour period, or as closely as possible as water levels are collected during one of the sampling events. Finally, once we have sufficient data to establish background levels and have performed the statistical analysis, we will provide that information.

Regards,

Jennifer McCarter, R.E.M.

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From: Jacobson, Linda <Jacobson.Linda@epa.gov>

Sent: Wednesday, November 4, 2020 9:42 AM

To: McCarter, Jennifer <jennifer.mccarter@xcelenergy.com>

Cc: Churchill, Stephen <Churchill.Stephen@epa.gov>; Bailey, Treasure <Bailey.Treasure@epa.gov>; jill.parisi <jill.parisi@state.co.us>; Kilty, Quinn V <quinn.v.kilty@xcelenergy.com>; Muller, Sheldon <Muller.Sheldon@epa.gov>

Subject: EPA request

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Jennifer,

We would prefer a single spreadsheet with all the data collected for the wells, including the older data as well as the recent data. We are also requesting a groundwater potentiometric surface map for Comanche that includes water levels from the newly-installed wells and the older wells together from a single, 24-hour measuring event. Or if it is not possible to get the potentiometric surface map, could we at least get a data table with the groundwater elevations as described above?

After you have collected sufficient data, we understand that you are going to establish background levels and perform a statistical analysis. Please share this evaluation with us, also.

Please let me know if you would like a short call to further clarify these requests. Thank you.

Linda Jacobson

From: McCarter, Jennifer <jennifer.mccarter@xcelenergy.com>

Sent: Tuesday, November 3, 2020 8:36 AM

To: Jacobson, Linda <Jacobson.Linda@epa.gov>

Cc: Churchill, Stephen <Churchill.Stephen@epa.gov>; Bailey, Treasure <Bailey.Treasure@epa.gov>; jill.parisi <jill.parisi@state.co.us>; Kilty, Quinn V <quinn.v.kilty@xcelenergy.com>

Subject: RE: problem with spreadsheets regarding column headers/id

Hi Linda, another option is to provide you output from the data base that HDR is compiling. They use Equis, so have been importing the lab EDDs directly, but could export the data in spreadsheet form with column headings. This would avoid the need for the lab to generate two EDDs for each report. Will this work for you all, or do you prefer getting the EDDs directly from the lab? You would still have the PDF lab reports.

Jennifer McCarter, R.E.M.

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Please consider the environment before printing this email

From: McCarter, Jennifer

Sent: Monday, November 2, 2020 2:46 PM

To: Jacobson, Linda <Jacobson.Linda@epa.gov>

Cc: Churchill, Stephen <Churchill.Stephen@epa.gov>; Bailey, Treasure <Bailey.Treasure@epa.gov>; jill.parisi <jill.parisi@state.co.us>; Kilty, Quinn V <quinn.v.kilty@xcelenergy.com>

Subject: RE: problem with spreadsheets regarding column headers/id

No problem Linda, I'll request the additional EDDs.

Jennifer McCarter, R.E.M.

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Please consider the environment before printing this email

From: Jacobson, Linda <Jacobson.Linda@epa.gov>

Sent: Monday, November 2, 2020 2:39 PM

To: McCarter, Jennifer <jennifer.mccarter@xcelenergy.com>

Cc: Churchill, Stephen <Churchill.Stephen@epa.gov>; Bailey, Treasure <Bailey.Treasure@epa.gov>; jill.parisi <jill.parisi@state.co.us>; Kilty, Quinn V <quinn.v.kilty@xcelenergy.com>

Subject: RE: problem with spreadsheets regarding column headers/id

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I polled the technical folks. We don't use Equis. The format you proposed with headings would work for us. I appreciate your cooperation and am sorry for any inconvenience.

Thank you.

From: McCarter, Jennifer <jennifer.mccarter@xcelenergy.com>

Sent: Monday, November 2, 2020 12:42 PM

To: Jacobson, Linda <Jacobson.Linda@epa.gov>

Cc: Churchill, Stephen <Churchill.Stephen@epa.gov>; Bailey, Treasure <Bailey.Treasure@epa.gov>; jill.parisi <jill.parisi@state.co.us>; Kilty, Quinn V <quinn.v.kilty@xcelenergy.com>

Subject: RE: problem with spreadsheets regarding column headers/id

Hi Linda, I heard back from the lab. Apparently the EDD they provided does not include headers because it is intended for direct upload to Earthsoft's Equis data base that is used in some EPA regions. In their response they did provide an alternative EDD format, example attached that includes column headings, but would not be compatible with the Equis database. I don't know if that's a tool used in Region 8 or HQ. If not, or if you prefer, I can request the reports in the attached format with headings, just let me know.

Jennifer McCarter, R.E.M.

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Please consider the environment before printing this email

From: McCarter, Jennifer

Sent: Monday, November 2, 2020 8:41 AM

To: Jacobson, Linda <Jacobson.Linda@epa.gov>; Kilty, Quinn V <quinn.v.kilty@xcelenergy.com>

Cc: Churchill, Stephen <Churchill.Stephen@epa.gov>; Bailey, Treasure <Bailey.Treasure@epa.gov>; jill.parisi <jill.parisi@state.co.us>

Subject: RE: problem with spreadsheets regarding column headers/id

Good morning all. Thanks Quinn for responding in my absence. I apologize I did not look closely at the spreadsheets before I sent them; they usually have column headers. I'm emailing the lab this morning to request resend of corrected files. Regarding some apparent missing sample results, I know that each sampling round had multiple lab reports and EDD files and wonder if some results just are on different spreadsheets; Steve I know you've looked at these, does that seem plausible? I'll look at this question and request clarification from the lab as well. Sorry for the confusion.

Jennifer McCarter, R.E.M.

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From: Kilty, Quinn V <quinn.v.kilty@xcelenergy.com>

Sent: Friday, October 30, 2020 2:43 PM

To: Jacobson, Linda <Jacobson.Linda@epa.gov>

Cc: McCarter, Jennifer <jennifer.mccarter@xcelenergy.com>

Subject: RE: problem with spreadsheets regarding column headers/id

Linda – I have been off these two days, sorry for the delayed response. Not sure why they would be unusable, but we will resend the files after verifying they are complete. However, we will need some time next week to review these and resend the working files and Jennifer is out today and part of

Monday. She will respond with an initial time estimate sometime on Monday.
Sorry for the troubles. Have a good weekend.
Quinn

From: Jacobson, Linda <Jacobson.Linda@epa.gov>
Sent: Thursday, October 29, 2020 12:53 PM
To: Kilty, Quinn V <quinn.v.kilty@xcelenergy.com>
Subject: FW: problem with spreadsheets regarding column headers/id

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current data; unfortunately, there is a problem with the column headers, etc. Please see the email below from Stephen Churchill. Can the spreadsheets be amended to make sure they are usable? This request can be addressed next week, if time is needed. Thank you.

From: Jacobson, Linda
Sent: Thursday, October 29, 2020 12:18 PM
To: McCarter, Jennifer <jennifer.mccarter@xcelenergy.com>
Subject: problem with spreadsheets regarding column headers/id

Jennifer,
Please let me know if the spreadsheets can be amended to address this concern and difficulty in using them. Thanks.
Linda Jacobson

From: Churchill, Stephen <Churchill.Stephen@epa.gov>
Sent: Thursday, October 29, 2020 11:22 AM
To: Jacobson, Linda <Jacobson.Linda@epa.gov>; Parisi - CDPHE, Jill <jill.parisi@state.co.us>
Subject: RE: sampling results for the data collected between 2015 and 2017 and results for new wells
Linda,
None of those csv/excel spreadsheets appear to be comprehensible for me. None of them have column header/id and many don't appear to have actual sampling results. Did anyone else have good success?
-Steve

From: Jacobson, Linda <Jacobson.Linda@epa.gov>
Sent: Thursday, October 29, 2020 11:22 AM
To: Churchill, Stephen <Churchill.Stephen@epa.gov>; Parisi - CDPHE, Jill <jill.parisi@state.co.us>
Subject: FW: sampling results for the data collected between 2015 and 2017 and results for new wells

From: McCarter, Jennifer <jennifer.mccarter@xcelenergy.com>
Sent: Thursday, October 29, 2020 9:18 AM
To: Jacobson, Linda <Jacobson.Linda@epa.gov>; Bailey, Treasure <Bailey.Treasure@epa.gov>
Subject: RE: sampling results for the data collected between 2015 and 2017 and results for new wells

Round 2 batch 2 of 2

Jennifer McCarter, R.E.M.

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From: McCarter, Jennifer

Sent: Thursday, October 29, 2020 9:13 AM

To: 'Jacobson, Linda' <Jacobson.Linda@epa.gov>; 'Bailey, Treasure' <Bailey.Treasure@epa.gov>

Subject: RE: sampling results for the data collected between 2015 and 2017 and results for new wells

Note, the revision to those two reports did not affect the EDDs, attached.

Jennifer McCarter, R.E.M.

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From: McCarter, Jennifer

Sent: Thursday, October 29, 2020 9:07 AM

To: 'Jacobson, Linda' <Jacobson.Linda@epa.gov>; 'Bailey, Treasure' <Bailey.Treasure@epa.gov>

Subject: RE: sampling results for the data collected between 2015 and 2017 and results for new wells

Sorry, there were revised reports for 398-1 and 398-2, attached. Minor revisions as noted on page 6 and page 4 respectively.

Jennifer McCarter, R.E.M.

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Please consider the environment before printing this email

From: McCarter, Jennifer

Sent: Thursday, October 29, 2020 8:57 AM

To: 'Jacobson, Linda' <Jacobson.Linda@epa.gov>; 'Bailey, Treasure' <Bailey.Treasure@epa.gov>

Subject: RE: sampling results for the data collected between 2015 and 2017 and results for new wells

Round 2 reports, batch one

Jennifer McCarter, R.E.M.

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From: McCarter, Jennifer

Sent: Wednesday, October 28, 2020 1:44 PM

To: Jacobson, Linda <Jacobson.Linda@epa.gov>

Cc: Bailley, Treasure <Bailley.Treasure@epa.gov>

Subject: RE: sampling results for the data collected between 2015 and 2017 and results for new wells

Round 1 remaining reports.

Jennifer McCarter, R.E.M.

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Please consider the environment before printing this email

From: McCarter, Jennifer

Sent: Wednesday, October 28, 2020 12:55 PM

To: Jacobson, Linda <Jacobson.Linda@epa.gov>

Cc: Bailley, Treasure <Bailley.Treasure@epa.gov>; Kilty, Quinn V <quinn.v.kilty@xcelenergy.com>

Subject: RE: sampling results for the data collected between 2015 and 2017 and results for new wells

Hi Linda, this is the first email transmitting results of updated background sampling at Comanche that began in August (round 1). Due to file size, even this first round needs to be sent in two emails.

For a number of reasons, there are multiple lab reports/emails for each sampling event. Each event required a follow up site visit to sample the slow recharge wells; these samples were then submitted on a separate chain of custody, which results in a separate lab report. Radium results take 30 days, and since we requested an expedited turn around time on all other constituents, this results in a separate/lagging report for radium. The lab EDD files are sometimes sent separately from the actual report document. Therefore, there are/will be a minimum of three lab reports/emails for each sampling event. Going forward we've asked the lab to try to consolidate and minimize number of reports where possible (ie. EDDs and reports in one email). I've started compiling a list of sample dates and lab report numbers to try to help clarify this, but in the interest of time I'll begin sending you the reports and if/when I complete that tracking tool, I'm happy to share with you. Also, these reports have not yet been through HDR's Stage 2B validation review process, and will be considered final once that review is complete (per the Data Management and Statistical Procedures Plan, 2016). HDR is also compiling all results into a spreadsheet, and I can send that as soon as it is available. If you like, I could send you interim versions as it is populated when lab reports are received; I'm not sure how helpful that will be, but let me know your preference.

Lastly, HDR will send the address and directions to the drill core warehouse, either later today or in the morning. I will be out tomorrow and Friday and will have them send it directly to you and Treasure. I'm not aware of any other EPA attendees, but if there are feel free to forward as

needed. I'll see you there on Monday.

Jennifer McCarter, R.E.M.

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Please consider the environment before printing this email

From: McCarter, Jennifer

Sent: Monday, October 26, 2020 2:35 PM

To: Jacobson, Linda <Jacobson.Linda@epa.gov>

Cc: Kilty, Quinn V <quinn.v.kilty@xcelenergy.com>

Subject: RE: sampling results for the data collected between 2015 and 2017 and results for new wells

I'll talk to HDR, that may be how they are planning to do it already, but don't know if it's updated yet with the more recent data.

Jennifer McCarter, R.E.M.

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E: jennifer.mccarter@xcelenergy.com

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Please consider the environment before printing this email

From: Jacobson, Linda <Jacobson.Linda@epa.gov>

Sent: Monday, October 26, 2020 2:26 PM

To: McCarter, Jennifer <jennifer.mccarter@xcelenergy.com>

Cc: Kilty, Quinn V <quinn.v.kilty@xcelenergy.com>

Subject: RE: sampling results for the data collected between 2015 and 2017 and results for new wells

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Thank you, Jennifer. You are correct that those results were previously provided. We look forward to receiving the lab reports and results for the more recent groundwater samples. In addition, would it also be possible to provide the results of the new sampling in the same spreadsheet with the 2015-2017 data?

From: McCarter, Jennifer <jennifer.mccarter@xcelenergy.com>

Sent: Monday, October 26, 2020 2:15 PM

To: Jacobson, Linda <Jacobson.Linda@epa.gov>

Cc: Kilty, Quinn V <quinn.v.kilty@xcelenergy.com>

Subject: RE: sampling results for the data collected between 2015 and 2017 and results for new wells

Linda, after our call with EPA on the 13th I realized that I had previously sent the 2015-2017 groundwater lab reports back in February and should have referenced them in our response we

provided on the 7 to EPA's questions. I am happy to send them again, but wanted to check with you first on your preference as there are a lot of large files. The attached email provides the email trail of when these were sent. I thought I'd see if that helps you find them more readily and avoid clogging up your email. If not, just let me know and I'm happy to resend. I'm also working on pulling together the more recent background sampling lab reports and hope to get those out this afternoon yet, or in the morning at the latest. Thanks.

Jennifer McCarter, R.E.M.

Xcel Energy

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Please consider the environment before printing this email

From: McCarter, Jennifer

Sent: Friday, October 23, 2020 4:19 PM

To: Jacobson, Linda <Jacobson.Linda@epa.gov>

Cc: Kilty, Quinn V <quinn.v.kilty@xcelenergy.com>; Bloomberg, Jon H

<Jon.H.Bloomberg@xcelenergy.com>; Johnston, Christine E

<Christine.Johnston@XCELENERGY.COM>; Clarke, Roger A <roger.a.clarke@xcelenergy.com>

Subject: RE: sampling results for the data collected between 2015 and 2017 and results for new wells

Hi Linda,

Your inquiry is timely as I have been working this afternoon organizing a status update and next steps so that we could send you an update next week; but let me respond now to your immediate questions and requests.

We did submit the discharge permit modification application to the state today, and I have attached a copy. Christine Johnston is my colleague who is responsible for CDPS permitting, and she initially reached out to the division October 13th to ask if they could provide an expedited review. They responded that if we submitted a complete application by the 23rd, they felt they could complete their review, public notice period and issue the modified permit effective April 1, 2021. We are continuing detailed design and procurement activity for the new treatment system and expect to meet the April 11, 2021 cease receipt date for CCR wastestreams. We intend to cease receipt of non-CCR wastestreams by January 31, 2021; page 13 of the attached document is the updated timeline. Therefore, we do not plan to submit to EPA an application for extension of time to cease receipt of waste in the bottom ash pond. I'll respond separately about the lab reports due to file size.

Regards,

Jennifer McCarter, R.E.M.

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From: Jacobson, Linda <Jacobson.Linda@epa.gov>

Sent: Friday, October 23, 2020 3:29 PM

To: McCarter, Jennifer <jennifer.mccarter@xcelenergy.com>

Subject: sampling results for the data collected between 2015 and 2017 and results for new wells

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Good Afternoon, Jennifer,

I am requesting the sample results for the data collected as part of your CCR program between 2015 and 2017. In your prior response, you listed the dates sampled but did not provide the sampling results. Could we also please get the sample results for the new wells? I believe you may have conducted three rounds of sampling at the new wells by now.

I thought I would just inquire on the progress being made to modify your Colorado discharge permit for your treatment system modification. If you have any information regarding this which you can share, it would be appreciated, including any submittals made to the state.

Thank you.

Linda Jacobson